

THE CHESTNUT BASTMINER¹

(Lepidoptera, Tineidæ)

By AUGUST BUSCK

Ectoedemia phleophaga, new species.

Palpi light yellow. Face and head dark ochreous. Antennæ blackish fuscous with narrow ochreous annulations and with large, ochreous white eye-caps. Thorax dark bluish fuscous. Forewings dark bluish fuscous, on the outer half irregularly dotted with black, several of the large scales being tipped with black; a large but poorly defined light

Fig. 1.—Venation of *Ectoedemia phleophaga* Busck.

ochreous costal patch at apical third and a similar poorly defined ochreous patch opposite it on the dorsal edge. Cilia light ochreous fuscous. Hindwing and cilia light ochreous fuscous; in the female of normal form; in the male with costa sharply excised from the middle with only one large bristle at base and with a long, light ochreous hair-pencil at the base of costa, reaching to the middle of the wing. Abdomen light golden fuscous. Legs golden on the inner side, blackish fuscous exteriorly. Alar expanse, 9–10 mm.

Habitat: Falls Church, Virginia.

Type, No. 16700, U. S. Nat. Mus.

Closely allied and identical in structure with the other species of this genus feeding on chestnut, the gall-making *Ectoedemia castaneae* Busck, but larger and with darker wings; the light colored head and abdomen easily distinguish it from this species.

The larva, which was first discovered by Mr. F. C. Craighead, lives in the lower layer of the bark on chestnut just above and encroaching

¹ This is the species referred to by A. G. Ruggles in Science of Dec. 12, 1913, as having an important bearing upon the spread of the chestnut bark disease.

The mine is figured in the Report of the State Forester of Massachusetts on the Chestnut Bark Disease, fig. 1, 1912.

upon the cambium; the mine is a slender serpentine, a few millimeters broad and several inches long, often doubling upon itself and broadening out to twice or more in width in early spring, when the larva reaches maturity; in April and early May the full-grown larva leaves the bark and falls to the ground, where it makes a closely woven, reddish brown cocoon among the rubbish, often boring down a few inches in the loose surface soil to find a suitable moist place on the underside of an old leaf or twig. The cocoon is oval, flattened, about 2 by 3 millimeters in diameter and $1\frac{1}{2}$ millimeters thick.

The imagos, which were reared at the Falls Church, Virginia, Forest Insect Station by Messrs. T. E. Snyder, Carl Heinrich, and the writer, issued from September 7 to September 25.

The larva is typical of the genus, without true legs or prolegs, but with traces of rudimentary prolegs on second and third thoracic segments and on all the abdominal segments except the two penultimate segments; none of these slight processes has any hooks; when full grown it is white with brown mouth parts; on first thoracic segment are two dorsal, brown, chitinized lines indicating the outer edges of a thoracic plate and one broad, rectangular, brown sternal plate; on the last abdominal segment are two diverging, brown, chitinized lines on the upper side indicating the outer edges of an anal plate; two similar chitinized ventral lines and two conspicuous brown apodemes, starting, one on each side, from edge of the anus.

FOUR NEW LEPIDOPTERA FROM BRITISH GUIANA

By HARRISON G. DYAR

HESPERIIDÆ

Lerema mooreana, new species.

Blackish brown; head with dull ochreous hairs, the fringe of the wings light. Male stigma oblique, dull black; three minute costo-subapical dots and one above vein 3. Female with the dots larger, a quadrate spot above vein 2 and a smaller one above vein 1, white but not hyaline. Below washed with dull ochreous, disk of fore wing black; spots repeated, the hind wing with a row of five faint pale spots between the veins near the middle, oblique, the upper spot retracted. Expanse, male, 28 mm.; female, 30 mm.